

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. Please cancel claim 38, amend claims 37 and 39 and add new claims 60-127 as follows:

Listing of Claims:

1-36. (Cancelled)

~~37.~~¹ (Amended) A method for planarizing a microelectronic substrate, comprising:

biasing the microelectronic substrate against a planarizing medium with a flexible membrane to exert a first force on a first part of the microelectronic substrate and exert a second force greater than the first force on a second part of the microelectronic substrate, the substrate being held stationary relative to the membrane as the substrate is biased against the planarizing medium;

engaging the first part of the microelectronic substrate with a first portion of the flexible membrane having a first thickness;

engaging the second part of the microelectronic substrate with a second portion of the flexible membrane having a second thickness greater than the first thickness; and

moving at least one of the microelectronic substrate and the planarizing medium relative to the other to remove material from the microelectronic substrate.

38. (Cancelled)

~~39.~~² (Amended) The method of claim [38] ~~37~~¹ wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate and engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially inwardly from the first annular part of the microelectronic substrate.

³/~~40~~. (Original) The method of claim ²/~~39~~ wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate and engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially outwardly from the first annular part of the microelectronic substrate.

41. (Cancelled)

⁴/~~42~~. (Original) The method of claim ¹/~~37~~ wherein the membrane has a first surface facing toward the microelectronic substrate and a second surface facing generally opposite the first surface, further wherein biasing the microelectronic substrate against the planarizing medium includes biasing a generally flat support member against the second surface of the membrane.

⁵/~~43~~. (Original) The method of claim ¹/~~37~~ wherein biasing the microelectronic substrate against a planarizing medium includes biasing the microelectronic substrate against a first portion of a polishing pad, further wherein moving the at least one of the microelectronic substrate and the planarizing medium includes advancing the polishing pad from a supply roller to a take-up roller to engage a second portion of the polishing pad with the first and second parts of the microelectronic substrate

⁶/~~44~~. (Original) The method of claim ¹/~~37~~, further comprising forming the membrane by disposing a membrane material in a mold.

⁷/~~45~~. (Original) The method of claim ¹/~~37~~, further comprising forming the membrane by providing a first ply of a membrane material at the first and second portions of the membrane and attaching a second ply of the membrane material to the first ply at the second portion of the membrane.

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46. (Original) The method of claim 37 wherein moving at least one of the microelectronic substrate and the planarizing medium relative to the other includes moving the first part of the microelectronic substrate and the planarizing medium at a first linear velocity relative to each other and moving the second part of the microelectronic substrate and the planarizing medium at a second linear velocity relative to each other, further wherein removing material from the microelectronic substrate includes removing material from the first part of the microelectronic substrate at a first rate and removing material from the second part of the microelectronic substrate at a second rate approximately the same as the first rate.

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47. (Original) The method of claim 37 wherein the membrane is the first of a first and second membrane, each membrane having a first portion with a first thickness and a second portion with a second thickness, a ratio of the first thickness to the second thickness of the first membrane having a first value, a ratio of the first thickness to the second thickness of the second membrane having a second value different than the first value, further comprising selecting the first membrane from the first and second membranes.

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48. (Previously Presented) A method for planarizing a microelectronic substrate, comprising:

biasing a first annular part of the microelectronic substrate against a planarizing medium with a first force by engaging the first annular part with a first portion of a flexible membrane having a first thickness;

biasing a second annular part of the microelectronic substrate against the planarizing medium with a second force greater than the first force by engaging the second annular part with a second portion of the flexible membrane having a second thickness greater than the first thickness, the substrate being held stationary relative to the membrane as the first annular part and the second annular part of the substrate is biased against the planarizing medium; and

moving at least one of the microelectronic substrate and the planarizing medium relative to the other to remove material from the microelectronic substrate.

49. (Cancelled)

¹¹~~50.~~ (Original) The method of claim ¹⁰~~48~~ wherein the membrane has a first surface facing toward the microelectronic substrate and a second surface facing generally opposite the first surface, further wherein biasing the microelectronic substrate against the planarizing medium includes biasing a generally flat support member against the second surface of the membrane.

¹²~~51.~~ (Original) The method of claim ¹⁰~~48~~ wherein biasing the microelectronic substrate against a planarizing medium includes biasing the microelectronic substrate against a first portion of a polishing pad, further wherein moving the at least one of the microelectronic substrate and the planarizing medium includes advancing the polishing pad from a supply roller to a take-up roller to engage a second portion of the polishing pad with the first and second parts of the microelectronic substrate

¹³~~52.~~ (Original) The method of claim ¹⁰~~48~~ wherein moving at least one of the microelectronic substrate and the planarizing medium relative to the other includes moving the first part of the microelectronic substrate and the planarizing medium at a first linear velocity relative to each other and moving the second part of the microelectronic substrate and the planarizing medium at a second linear velocity relative to each other, further wherein removing material from the microelectronic substrate includes removing material from the first part of the microelectronic substrate at a first rate and removing material from the second part of the microelectronic substrate at a second rate approximately the same as the first rate.

¹⁴~~53.~~ (Original) The method of claim ¹⁰~~48~~ wherein the membrane is the first of a first and second membrane, each membrane having a first portion with a first thickness and a second portion with a second thickness, a ratio of the first thickness to the second thickness of the first membrane having a first value, a ratio of the first thickness to the second thickness of the second membrane having a second value different than the first value, further comprising selecting the first membrane from the first and second membranes.

54-59. (Cancelled)

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60.

(New) A method for planarizing a microelectronic substrate, comprising:

biasing the microelectronic substrate against a planarizing medium with a flexible membrane to exert a first force on a first part of the microelectronic substrate and exert a second force greater than the first force on a second part of the microelectronic substrate, the substrate being held stationary relative to the membrane as the substrate is biased against the planarizing medium;

engaging the first part of the microelectronic substrate with a first portion of the flexible membrane having a first thickness, wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate;

engaging the second part of the microelectronic substrate with a second portion of the flexible membrane having a second thickness greater than the first thickness, wherein engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially inwardly from the first annular part of the microelectronic substrate; and

moving at least one of the microelectronic substrate and the planarizing medium relative to the other to remove material from the microelectronic substrate.

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61.

(New) The method of claim ¹⁵60 wherein the membrane has a first surface facing toward the microelectronic substrate and a second surface facing generally opposite the first surface, further wherein biasing the microelectronic substrate against the planarizing medium includes biasing a generally flat support member against the second surface of the membrane.

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62.

(New) The method of claim ¹⁵60 wherein biasing the microelectronic

substrate against a planarizing medium includes biasing the microelectronic substrate against a first portion of a polishing pad, further wherein moving the at least one of the microelectronic substrate and the planarizing medium includes advancing the polishing pad from a supply roller

to a take-up roller to engage a second portion of the polishing pad with the first and second parts of the microelectronic substrate

¹⁸~~63.~~ (New) The method of claim ¹⁵~~60~~, further comprising forming the membrane by disposing a membrane material in a mold.

¹⁹~~64.~~ (New) The method of claim ¹⁵~~60~~, further comprising forming the membrane by providing a first ply of a membrane material at the first and second portions of the membrane and attaching a second ply of the membrane material to the first ply at the second portion of the membrane.

²⁰~~65.~~ (New) The method of claim ¹⁵~~60~~ wherein moving at least one of the microelectronic substrate and the planarizing medium relative to the other includes moving the first part of the microelectronic substrate and the planarizing medium at a first linear velocity relative to each other and moving the second part of the microelectronic substrate and the planarizing medium at a second linear velocity relative to each other, further wherein removing material from the microelectronic substrate includes removing material from the first part of the microelectronic substrate at a first rate and removing material from the second part of the microelectronic substrate at a second rate approximately the same as the first rate.

²¹~~66.~~ (New) The method of claim ¹⁵~~60~~ wherein the membrane is the first of a first and second membrane, each membrane having a first portion with a first thickness and a second portion with a second thickness, a ratio of the first thickness to the second thickness of the first membrane having a first value, a ratio of the first thickness to the second thickness of the second membrane having a second value different than the first value, further comprising selecting the first membrane from the first and second membranes.

²²~~67.~~ (New) A method for planarizing a microelectronic substrate, comprising:
biasing the microelectronic substrate against a planarizing medium with a flexible membrane to exert a first force on a first part of the microelectronic substrate and exert a second

force greater than the first force on a second part of the microelectronic substrate, the substrate being held stationary relative to the membrane as the substrate is biased against the planarizing medium;

engaging the first part of the microelectronic substrate with a first portion of the flexible membrane having a first thickness, wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate;

engaging the second part of the microelectronic substrate with a second portion of the flexible membrane having a second thickness greater than the first thickness, wherein engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially outwardly from the first annular part of the microelectronic substrate; and

moving at least one of the microelectronic substrate and the planarizing medium relative to the other to remove material from the microelectronic substrate.

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~~68~~. (New) The method of claim ²²~~67~~ wherein the membrane has a first surface facing toward the microelectronic substrate and a second surface facing generally opposite the first surface, further wherein biasing the microelectronic substrate against the planarizing medium includes biasing a generally flat support member against the second surface of the membrane.

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~~69~~. (New) The method of claim ²²~~67~~ wherein biasing the microelectronic substrate against a planarizing medium includes biasing the microelectronic substrate against a first portion of a polishing pad, further wherein moving the at least one of the microelectronic substrate and the planarizing medium includes advancing the polishing pad from a supply roller to a take-up roller to engage a second portion of the polishing pad with the first and second parts of the microelectronic substrate.

²⁵
~~70~~. (New) The method of claim ²²~~67~~, further comprising forming the membrane by disposing a membrane material in a mold.

28 ~~71~~ (New) The method of claim ~~67~~²², further comprising forming the membrane by providing a first ply of a membrane material at the first and second portions of the membrane and attaching a second ply of the membrane material to the first ply at the second portion of the membrane.

29 ~~72~~ (New) The method of claim ~~67~~²² wherein moving at least one of the microelectronic substrate and the planarizing medium relative to the other includes moving the first part of the microelectronic substrate and the planarizing medium at a first linear velocity relative to each other and moving the second part of the microelectronic substrate and the planarizing medium at a second linear velocity relative to each other, further wherein removing material from the microelectronic substrate includes removing material from the first part of the microelectronic substrate at a first rate and removing material from the second part of the microelectronic substrate at a second rate approximately the same as the first rate.

30 ~~73~~ (New) The method of claim ~~67~~²² wherein the membrane is the first of a first and second membrane, each membrane having a first portion with a first thickness and a second portion with a second thickness, a ratio of the first thickness to the second thickness of the first membrane having a first value, a ratio of the first thickness to the second thickness of the second membrane having a second value different than the first value, further comprising selecting the first membrane from the first and second membranes.

31 ~~74~~ (New) A method for planarizing a microelectronic substrate, comprising:
biasing the microelectronic substrate against a planarizing medium with a flexible membrane to exert a first force on a first part of the microelectronic substrate and exert a second force greater than the first force on a second part of the microelectronic substrate, the substrate being held stationary relative to the membrane as the substrate is biased against the planarizing medium, wherein the membrane has a first surface facing toward the microelectronic substrate and a second surface facing generally opposite the first surface, further wherein biasing the

microelectronic substrate against the planarizing medium includes biasing a generally flat support member against the second surface of the membrane; and

moving at least one of the microelectronic substrate and the planarizing medium relative to the other to remove material from the microelectronic substrate.

³⁰
~~75~~. (New) The method of claim ²⁹~~74~~, further comprising:

engaging the first part of the microelectronic substrate with a first portion of the flexible membrane having a first thickness;

engaging the second part of the microelectronic substrate with a second portion of the flexible membrane having a second thickness greater than the first thickness.

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~~76~~. (New) The method of claim ³⁰~~75~~ wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate and engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially inwardly from the first annular part of the microelectronic substrate.

³²
~~77~~. (New) The method of claim ³⁰~~75~~ wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate and engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially outwardly from the first annular part of the microelectronic substrate.

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~~78~~. (New) The method of claim ²⁹~~74~~ wherein biasing the microelectronic substrate against a planarizing medium includes biasing the microelectronic substrate against a first portion of a polishing pad, further wherein moving the at least one of the microelectronic substrate and the planarizing medium includes advancing the polishing pad from a supply roller to a take-up roller to engage a second portion of the polishing pad with the first and second parts of the microelectronic substrate

³⁴₇₉ (New) The method of claim ²⁹₇₄, further comprising forming the membrane by disposing a membrane material in a mold.

³⁵₈₀ (New) The method of claim ²⁹₇₄, further comprising forming the membrane by providing a first ply of a membrane material at the first and second portions of the membrane and attaching a second ply of the membrane material to the first ply at the second portion of the membrane.

³⁶₈₁ (New) The method of claim ²⁹₇₄ wherein moving at least one of the microelectronic substrate and the planarizing medium relative to the other includes moving the first part of the microelectronic substrate and the planarizing medium at a first linear velocity relative to each other and moving the second part of the microelectronic substrate and the planarizing medium at a second linear velocity relative to each other, further wherein removing material from the microelectronic substrate includes removing material from the first part of the microelectronic substrate at a first rate and removing material from the second part of the microelectronic substrate at a second rate approximately the same as the first rate.

³⁷₈₂ (New) The method of claim ²⁹₇₄ wherein the membrane is the first of a first and second membrane, each membrane having a first portion with a first thickness and a second portion with a second thickness, a ratio of the first thickness to the second thickness of the first membrane having a first value, a ratio of the first thickness to the second thickness of the second membrane having a second value different than the first value, further comprising selecting the first membrane from the first and second membranes.

³⁸₈₃ (New) A method for planarizing a microelectronic substrate, comprising:

biasing the microelectronic substrate against a planarizing medium with a flexible membrane to exert a first force on a first part of the microelectronic substrate and

exert a second force greater than the first force on a second part of the microelectronic substrate, the substrate being held stationary relative to the membrane as the substrate is biased against the planarizing medium, wherein biasing the microelectronic substrate against a planarizing medium includes biasing the microelectronic substrate against a first portion of a polishing pad, further wherein moving the at least one of the microelectronic substrate and the planarizing medium includes advancing the polishing pad from a supply roller to a take-up roller to engage a second portion of the polishing pad with the first and second parts of the microelectronic substrate; and

moving at least one of the microelectronic substrate and the planarizing medium relative to the other to remove material from the microelectronic substrate.

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~~84.~~ (New) The method of claim ³⁸~~83~~, further comprising:

engaging the first part of the microelectronic substrate with a first portion of the flexible membrane having a first thickness;

engaging the second part of the microelectronic substrate with a second portion of the flexible membrane having a second thickness greater than the first thickness.

⁴⁰
~~85.~~ (New) The method of claim ³⁹~~84~~ wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate and engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially inwardly from the first annular part of the microelectronic substrate.

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~~86.~~ (New) The method of claim ³⁹~~84~~ wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate and engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially outwardly from the first annular part of the microelectronic substrate.

~~49~~³⁸ 87. (New) The method of claim ~~83~~³⁸ wherein the membrane has a first surface facing toward the microelectronic substrate and a second surface facing generally opposite the first surface, further wherein biasing the microelectronic substrate against the planarizing medium includes biasing a generally flat support member against the second surface of the membrane.

~~43~~³⁸ 88. (New) The method of claim ~~83~~³⁸, further comprising forming the membrane by disposing a membrane material in a mold.

~~44~~³⁸ 89. (New) The method of claim ~~83~~³⁸, further comprising forming the membrane by providing a first ply of a membrane material at the first and second portions of the membrane and attaching a second ply of the membrane material to the first ply at the second portion of the membrane.

~~45~~³⁸ 90. (New) The method of claim ~~83~~³⁸ wherein moving at least one of the microelectronic substrate and the planarizing medium relative to the other includes moving the first part of the microelectronic substrate and the planarizing medium at a first linear velocity relative to each other and moving the second part of the microelectronic substrate and the planarizing medium at a second linear velocity relative to each other, further wherein removing material from the microelectronic substrate includes removing material from the first part of the microelectronic substrate at a first rate and removing material from the second part of the microelectronic substrate at a second rate approximately the same as the first rate.

~~46~~³⁸ 91. (New) The method of claim ~~83~~³⁸ wherein the membrane is the first of a first and second membrane, each membrane having a first portion with a first thickness and a second portion with a second thickness, a ratio of the first thickness to the second thickness of the first membrane having a first value, a ratio of the first thickness to the second thickness of the second membrane having a second value different than the first value, further comprising selecting the first membrane from the first and second membranes.

⁴⁷92. (New) A method for planarizing a microelectronic substrate, comprising:

biasing the microelectronic substrate against a planarizing medium with a flexible membrane formed by disposing a membrane material in a mold, the membrane exerting a first force on a first part of the microelectronic substrate and exert a second force greater than the first force on a second part of the microelectronic substrate, the substrate being held stationary relative to the membrane as the substrate is biased against the planarizing medium; and

moving at least one of the microelectronic substrate and the planarizing medium relative to the other to remove material from the microelectronic substrate.

⁴⁸93. (New) The method of claim ⁴⁷92, further comprising:

engaging the first part of the microelectronic substrate with a first portion of the flexible membrane having a first thickness;

engaging the second part of the microelectronic substrate with a second portion of the flexible membrane having a second thickness greater than the first thickness.

⁴⁹94. (New) The method of claim ⁴⁸93 wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate and engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially inwardly from the first annular part of the microelectronic substrate.

⁵⁰95. (New) The method of claim ⁴⁸93 wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate and engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially outwardly from the first annular part of the microelectronic substrate.

⁵¹96. (New) The method of claim ⁴⁷92 wherein the membrane has a first surface facing toward the microelectronic substrate and a second surface facing generally opposite the first surface, further wherein biasing the microelectronic substrate against the planarizing

medium includes biasing a generally flat support member against the second surface of the membrane.

⁵²
97. (New) The method of claim ⁴⁷92 wherein biasing the microelectronic substrate against a planarizing medium includes biasing the microelectronic substrate against a first portion of a polishing pad, further wherein moving the at least one of the microelectronic substrate and the planarizing medium includes advancing the polishing pad from a supply roller to a take-up roller to engage a second portion of the polishing pad with the first and second parts of the microelectronic substrate.

⁵³
98. (New) The method of claim ⁴⁷92, further comprising forming the membrane by providing a first ply of a membrane material at the first and second portions of the membrane and attaching a second ply of the membrane material to the first ply at the second portion of the membrane.

⁵⁴
99. (New) The method of claim ⁴⁷92 wherein moving at least one of the microelectronic substrate and the planarizing medium relative to the other includes moving the first part of the microelectronic substrate and the planarizing medium at a first linear velocity relative to each other and moving the second part of the microelectronic substrate and the planarizing medium at a second linear velocity relative to each other, further wherein removing material from the microelectronic substrate includes removing material from the first part of the microelectronic substrate at a first rate and removing material from the second part of the microelectronic substrate at a second rate approximately the same as the first rate.

⁵⁵
100. (New) The method of claim ⁴⁷92 wherein the membrane is the first of a first and second membrane, each membrane having a first portion with a first thickness and a second portion with a second thickness, a ratio of the first thickness to the second thickness of the first membrane having a first value, a ratio of the first thickness to the second thickness of the second membrane having a second value different than the first value, further comprising selecting the first membrane from the first and second membranes.

⁵⁶~~101~~. (New) A method for planarizing a microelectronic substrate, comprising:

forming a flexible membrane by providing a first ply of a membrane material at a first and second portions of the membrane and attaching a second ply of the membrane material to the first ply at the second portion of the membrane;

biasing the microelectronic substrate against a planarizing medium with the flexible membrane to exert a first force on a first part of the microelectronic substrate and exert a second force greater than the first force on a second part of the microelectronic substrate, the substrate being held stationary relative to the membrane as the substrate is biased against the planarizing medium; and

moving at least one of the microelectronic substrate and the planarizing medium relative to the other to remove material from the microelectronic substrate.

⁵⁷~~102~~. (New) The method of claim ⁵⁶~~101~~, further comprising:

engaging the first part of the microelectronic substrate with a first portion of the flexible membrane having a first thickness;

engaging the second part of the microelectronic substrate with a second portion of the flexible membrane having a second thickness greater than the first thickness.

⁵⁸~~103~~. (New) The method of claim ⁵⁷~~102~~ wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate and engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially inwardly from the first annular part of the microelectronic substrate.

⁵⁹~~104~~. (New) The method of claim ⁵⁸~~103~~ wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate and engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially outwardly from the first annular part of the microelectronic substrate.

⁶⁰105. (New) The method of claim ⁵⁶101 wherein the membrane has a first surface facing toward the microelectronic substrate and a second surface facing generally opposite the first surface, further wherein biasing the microelectronic substrate against the planarizing medium includes biasing a generally flat support member against the second surface of the membrane.

⁶¹106. (New) The method of claim ⁵⁶101 wherein biasing the microelectronic substrate against a planarizing medium includes biasing the microelectronic substrate against a first portion of a polishing pad, further wherein moving the at least one of the microelectronic substrate and the planarizing medium includes advancing the polishing pad from a supply roller to a take-up roller to engage a second portion of the polishing pad with the first and second parts of the microelectronic substrate

⁶²107. (New) The method of claim ⁵⁶101, further comprising forming the membrane by disposing a membrane material in a mold.

⁶³108. (New) The method of claim ⁵⁶101 wherein moving at least one of the microelectronic substrate and the planarizing medium relative to the other includes moving the first part of the microelectronic substrate and the planarizing medium at a first linear velocity relative to each other and moving the second part of the microelectronic substrate and the planarizing medium at a second linear velocity relative to each other, further wherein removing material from the microelectronic substrate includes removing material from the first part of the microelectronic substrate at a first rate and removing material from the second part of the microelectronic substrate at a second rate approximately the same as the first rate.

⁶⁴109. (New) The method of claim ⁵⁶101 wherein the membrane is the first of a first and second membrane, each membrane having a first portion with a first thickness and a second portion with a second thickness, a ratio of the first thickness to the second thickness of the first membrane having a first value, a ratio of the first thickness to the second thickness of the

second membrane having a second value different than the first value, further comprising selecting the first membrane from the first and second membranes.

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(New) A method for planarizing a microelectronic substrate, comprising:

biasing the microelectronic substrate against a planarizing medium with a flexible membrane to exert a first force on a first part of the microelectronic substrate and exert a second force greater than the first force on a second part of the microelectronic substrate, the substrate being held stationary relative to the membrane as the substrate is biased against the planarizing medium; and

moving at least one of the microelectronic substrate and the planarizing medium relative to the other to remove material from the microelectronic substrate, wherein moving includes moving the first part of the microelectronic substrate and the planarizing medium at a first linear velocity relative to each other and moving the second part of the microelectronic substrate and the planarizing medium at a second linear velocity relative to each other, further wherein removing material from the microelectronic substrate includes removing material from the first part of the microelectronic substrate at a first rate and removing material from the second part of the microelectronic substrate at a second rate approximately the same as the first rate.

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111.

(New) The method of claim 110, further comprising:

engaging the first part of the microelectronic substrate with a first portion of the flexible membrane having a first thickness;

engaging the second part of the microelectronic substrate with a second portion of the flexible membrane having a second thickness greater than the first thickness.

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112.

(New) The method of claim 111 wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate and engaging the second part of the microelectronic substrate includes engaging a second

annular part of the microelectronic substrate disposed radially inwardly from the first annular part of the microelectronic substrate.

⁶⁸
~~113.~~ (New) The method of claim ~~111~~⁶⁶ wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate and engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially outwardly from the first annular part of the microelectronic substrate.

⁶⁹
~~114.~~ (New) The method of claim ~~110~~⁶⁵ wherein the membrane has a first surface facing toward the microelectronic substrate and a second surface facing generally opposite the first surface, further wherein biasing the microelectronic substrate against the planarizing medium includes biasing a generally flat support member against the second surface of the membrane.

⁷⁰
~~115.~~ (New) The method of claim ~~110~~⁶⁵ wherein biasing the microelectronic substrate against a planarizing medium includes biasing the microelectronic substrate against a first portion of a polishing pad, further wherein moving the at least one of the microelectronic substrate and the planarizing medium includes advancing the polishing pad from a supply roller to a take-up roller to engage a second portion of the polishing pad with the first and second parts of the microelectronic substrate

⁷¹
~~116.~~ (New) The method of claim ~~110~~⁶⁵, further comprising forming the membrane by disposing a membrane material in a mold.

⁷²
~~117.~~ (New) The method of claim ~~110~~⁶⁵, further comprising forming the membrane by providing a first ply of a membrane material at the first and second portions of the membrane and attaching a second ply of the membrane material to the first ply at the second portion of the membrane.

⁶⁵
~~118~~ (New) The method of claim ~~110~~ wherein the membrane is the first of a first and second membrane, each membrane having a first portion with a first thickness and a second portion with a second thickness, a ratio of the first thickness to the second thickness of the first membrane having a first value, a ratio of the first thickness to the second thickness of the second membrane having a second value different than the first value, further comprising selecting the first membrane from the first and second membranes.

⁷⁴
~~119~~ (New) A method for planarizing a microelectronic substrate, comprising:
biasing the microelectronic substrate against a planarizing medium with a flexible membrane to exert a first force on a first part of the microelectronic substrate and exert a second force greater than the first force on a second part of the microelectronic substrate, the substrate being held stationary relative to the membrane as the substrate is biased against the planarizing medium, wherein the membrane is the first of a first and second membrane, each membrane having a first portion with a first thickness and a second portion with a second thickness, a ratio of the first thickness to the second thickness of the first membrane having a first value, a ratio of the first thickness to the second thickness of the second membrane having a second value different than the first value, further comprising selecting the first membrane from the first and second membranes; and

moving at least one of the microelectronic substrate and the planarizing medium relative to the other to remove material from the microelectronic substrate.

⁷⁵
~~120~~ (New) The method of claim ⁷⁴~~119~~, further comprising:
engaging the first part of the microelectronic substrate with a first portion of the flexible membrane having a first thickness;

engaging the second part of the microelectronic substrate with a second portion of the flexible membrane having a second thickness greater than the first thickness.

⁷⁶
~~121~~ (New) The method of claim ⁷⁵~~120~~ wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate

and engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially inwardly from the first annular part of the microelectronic substrate.

⁷⁷
~~122~~. (New) The method of claim ⁷⁵~~120~~ wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate and engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially outwardly from the first annular part of the microelectronic substrate.

⁷⁸
~~123~~. (New) The method of claim ⁷⁴~~119~~ wherein the membrane has a first surface facing toward the microelectronic substrate and a second surface facing generally opposite the first surface, further wherein biasing the microelectronic substrate against the planarizing medium includes biasing a generally flat support member against the second surface of the membrane.

⁷⁹
~~124~~. (New) The method of claim ⁷⁴~~119~~ wherein biasing the microelectronic substrate against a planarizing medium includes biasing the microelectronic substrate against a first portion of a polishing pad, further wherein moving the at least one of the microelectronic substrate and the planarizing medium includes advancing the polishing pad from a supply roller to a take-up roller to engage a second portion of the polishing pad with the first and second parts of the microelectronic substrate.

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~~125~~. (New) The method of claim ⁷⁴~~119~~, further comprising forming the membrane by disposing a membrane material in a mold.

⁸¹
~~126~~. (New) The method of claim ⁷⁴~~119~~, further comprising forming the membrane by providing a first ply of a membrane material at the first and second portions of the membrane and attaching a second ply of the membrane material to the first ply at the second portion of the membrane.

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127.

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(New) The method of claim 119 wherein moving at least one of the microelectronic substrate and the planarizing medium relative to the other includes moving the first part of the microelectronic substrate and the planarizing medium at a first linear velocity relative to each other and moving the second part of the microelectronic substrate and the planarizing medium at a second linear velocity relative to each other, further wherein removing material from the microelectronic substrate includes removing material from the first part of the microelectronic substrate at a first rate and removing material from the second part of the microelectronic substrate at a second rate approximately the same as the first rate.
